GENERAL INTERSECTION OPERATION OPERATING ALONE. CONTROLLER REQUIREMENTS PEDESTRIAN OPERATION WILL ANNOUNCE THE FOLLOWING MESSAGE: WALK: RAPID TICK ST. MONICA DRIVE (WEST LEG) WALK: RAPID TICK MS. ERIN KUHN PHONE: (410) 229-2380 PHONE: (410) 229-2361 MR. MIKE PASQUARIELLO DISTRICT UTILITY ENGINEER PHONE: (410) 229-2341 WIRING KEY L } LEAD-IN CABLE

PROJECT DESCRIPTION THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL TO INSTALL APS (ACCESSIBLE PEDESTRIAN SIGNALS) AT THE INTERSECTION OF MD 151 (NORTH POINT BLVD.) AND ST. MONICA DR. IN BALTIMORE COUNTY, MARYLAND. MD 151 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION. THE INTERSECTION OPERATES IN A NEMA FOUR-PHASE, FULL TRAFFIC ACTUATED MODE WITH THE MD 151 (NORTH POINT BLVD.) APPROACHES OPERATING CONCURRENTLY AND THE ST MONICA DRIVE APPROACH

AN EXCLUSIVE/ PERMISSIVE LEFT TURN IS PROVIDED ON THE NORTHBOUND MD 151 APPROACH.

AN ALTERNATE PEDESTRIAN PHASE WILL BE PROVIDED ACROSS THE NORTH LEG OF MD 151 (NORTH POINT BLVD.) AND PEDESTRIAN INDICATIONS WILL BE PROVIDED ACROSS THE ST MONICA DRIVE APPROACH.

THE EXISTING BASE MOUNTED CABINET AND CONTROLLER WILL BE USED. THE CONTROLLER SHALL BE RETROFITTED TO OPERATE VIDEO DETECTION EQUIPMENT.

NAVIGATOR AUDIBLE PEDESTRIAN PUSHBUTTON MOVEMENTS TO CROSS THE NORTH AND WEST LEGS ARE TO BE PROVIDED WHEN THE PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT

MD 151 (NORTH POINT BLVD.) (NORTH LEG)

WAIT: "WAIT TO CROSS NORTH POINT AT ST, MONICA"

WAIT: "WAIT TO CROSS ST. MONICA AT NORTH POINT"

MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT. ADDITIONAL TRAFFIC CONTROL STANDARDS MAY BE USED AS DIRECTED BY THE ENGINEER.

STANDARD NO. MD-104.04-01 (SHOULDER WORK)

STANDARD NO. MD-104.04-13 (LEFT TURN BAY CLOSURE) STANDARD NO. MD-104.04-15 (INTERSECTION LEFT

ASSISTANT CHIEF, TRAFFIC OPERATIONS DIVISION PHONE: (410) 787-7631

MR. RICHARD L. DAFF, SR. CHIEF, TRAFFIC OPERATIONS DIVISION PHONE: (410) 787-7630

LANE, TURN BAY)

В **←**

~ A,B,C,D,E,

F,G,H,J,K, L.M.N.O.Q.R

STANDARD NO. MD-104.04-03 (LEFT LANE CLOSURE) STANDARD NO. MD-104.04-05 (RIGHT LANE CLOSURE)

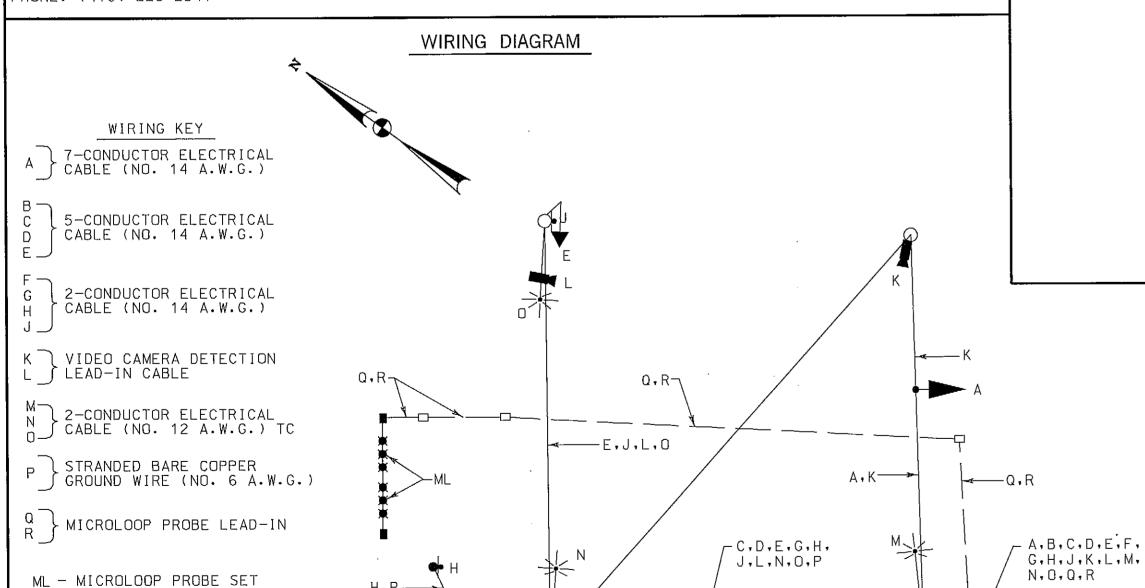
MR. ROBERT SYNDER

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

--- ASSISTANT DISTRICT ENGINEER - TRAFFIC

MR. ANDRE FUTRELL ASSISTANT DISTRICT ENGINEER — MAINTENANCE



└C.D.E.J. L,N,O

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO. QUANTITY DESCRIPTION.	
9086 1 EACH VIDEO INTERFACE EQUIPMENT: 1-4 CAMERAS	
9571 38 S.F. SHEET ALUMINUM SIGNS TO CONSIST OF:	
- 4 EACH R10-3(1) SIGN (9 IN. x 15 IN.) - POLE MOUNT	
- 1 EACH ASSOCIATED SHIELD ASSEMBLY "NORTH, MD 151, F (30 IN. x 48 IN.) - GROUND MOUNT	RIGHT ARROW"
- 1 EACH ASSOCIATED SHIELD ASSEMBLY "NORTH, MD 151, L (48 IN. x 72 IN.) - GROUND MOUNT	_EFT ARROW"

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA ALL REMOVED SIGNAL MATERIALS SHALL BECOME PROPERTY OF THE CONTRACTOR



PHASE CHART

1	2	3	4	5	6	7	8	9	10	11
(¥)(R) (¥)(Y) (¥)(G)	(R) (Y) (Y) (G) (G)	R > G	RYG	RYG	R Y G	R Y G	68	於田	於田	\$10

PHASE 1 + 6	G—G—	←G—	G	R	R	R	R	DW	DW	DW	DW	-
1 + 6 CHANGE	G ←Ÿ—	←Ÿ—	G	R	R	R	R	DW	DW	DW	DW	- \psi
PHASE 2 + 6	G	G	G	G	G	R	R	WK	WK	DW	DW	<u> </u>
PED. CLEARANCE	G	G	G	G	G	R	R	FL/DW	FL/DW	DW	DW	
2 + 6 CHANGE	Y	Υ	Υ	Υ	Y	R	R	DW	DW	DW	DW	• -
PHASE 4	R	R	R	R	R	. G	G	DW	DW	DW	DW	_
4 CHANGE	R	R	R	R	R	Υ	Y	DW	DW .	DW	DW	-1
PHASE 4	R	R	R	R	R	G	G	DW	DW	WK	WK	∫ • ♠
PED. CLEARANCE	R	R	R	R	R	G	G	DW	DW	FL/DW	FL/DW	
4 ALT CHANGE	R	R	R	R	R	Υ	Y	DW	DW	DW	DW	• - +
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLY	FL/R	FL/R	DARK	DARK	DARK	DARK	4



ITEM NO.	QUANTITY	DESCRIPTION	
1001	1 EACH	MAINTENANCE OF TRAFFIC	

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

	112111110	WOANTITT	- DESCRIPTION
	1001	1 EACH	MAINTENANCE OF TRAFFIC
	1003	200 L.F.	REMOVAL OF EXISTING PAVEMENT LINE MARKINGS, ANY WIDTH
,	2001	12 C.Y.	CLASS 2 EXCAVATION
	5001	35 L.F.	5 INCH WHITE LEAD FREE REFELCTIVE THERMOPLASTIC PAVEMENT MARKINGS
	5002	385 L.F.	12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
	5003	137 L.F.	24 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
	6001	90 L.F.	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH
	6002	790 S.F.	5 INCH CONCRETE SIDEWALK
	8001	22 EACH	12 INCH (R,Y,G) LED SIGNAL HEAD SECTION
	8002	3 EACH	15 FOOT LIGHTING ARM ON EXISTING STRUCTURE
	8003	1 EACH	2 WIRE CENTRAL CONTROL UNIT
	8007	3 EACH	8 INCH LED SIGNAL (R.Y.G.) HEAD SECTION
	8008	1 EACH	ADJUST AND RE-RING EXISTING SPAN WIRE (EACH SPAN)
	8009	1 EACH	ADJUST HANDHOLE TO GRADE
	8010	4 EACH	AUDIBLE/ TACTILE PEDESTRIAN PUSHBUTTON STATION & SIGNS
	8011	3 EACH	BREAKAWAY PEDESTAL POLE (ANY SIZE)
	8014	4 EACH	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD
	. 8017	1 EACH	REMOVE & DISPOSE OF EQUIPMENT (PER ASSIGNMENT)
	8025	625 L.F.	ELECTRICAL CABLE -2 CONDUCTOR (NO. 12 AWG) - TRAY CABLE
	8026	55 L.F.	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
	8027	105 L.F.	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
	8028	55 L.F.	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
	8029	60 S.F.	DETECTABLE WARNING SURFACES
	8030	4 S.F.	RELOCATE EXISTING SIGN
	8032	13 L.F.	WOOD SIGN SUPPORTS 4 INCH X 4 INCH
	8034	185 L.F.	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
	8036	2 EACH	WEATHER HEAD. 3 INCH
	8044	2 EACH	NONINVASIVE DETECTOR ,1000 FOOT LEAD IN CABLE
	8045	3 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
	8047	38 S.F.	INSTALL OVERHEAD SIGN
	8048	2 EACH	VIDEO DETECTION CAMERA AND CABLE UP TO 500 FT



TS NO.

250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE

ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)

ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION

MD 151 (North Point Blvd.) and St. Monica Drive Dundalk, Maryland

GENERAL	INFORMATION	SHEET
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SCALE 1" =	20'ADVERTISED DATE_	3/15/2010 CONTR	ACT NO. <u>XX4485185</u>
DESIGNED BY_	B. DONOWAY	COUNTY	Baltimore
DRAWN BY	B. DONOWAY	LOGMILE	
CHECKED BY	N.LEARY	TIMS NO	K355
F.A.P. NO		TOD NO	

DRAWING TSP-3 OF 3 SHEET NO. 3 OF 3

PLOTTED: 04-13-2010 FILE: n:\31669-061\cadd\pSG-N003_K355.dgn

3 EACH

735 L.F.

720 L.F.

135 L.F.

8052

8056

8058

8059

WHITMAN, REQUARDT & ASSOCIATES, LLP 801 South Caroline Street, Baltimore, Maryland 21231

+ - $\frac{3}{4}$ IN. X 10 FT, GROUND ROD